

Docket No. F-8223

Ser. No. 10/823,863

REMARKS

Claims 1, 2 and 4-19 remain pending in this application. Claim 1-19 are rejected. Claim 1 is amended herein to merely incorporate the subject matter of claim 3 hence making no substantive changes to the subject matter of claim 3 and addressing only matters of form unrelated to substantive patentability issues with regard to subject matter of claim 3 now reflected in claim 1.

CLAIM REJECTIONS UNDER 35 U.S.C. §§ 102(b) and 103(a)

Claims 1, 2 and 4-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by either the Hideo or Mikiaki references or in the alternative under 35 U.S.C. § 103(a) as being rendered obvious by either the Hideo or Mikiaki references. Claims 3 and 19 are rejected under 35 U.S.C. § 103(a) as being rendered obvious by either the Hideo or Mikiaki references. Applicant herein respectfully traverses these rejections.

The Office Action determination of the patentability of a product-by-process claim turns on the whether the product produced is distinguishable of the prior art product. It is well established that product claims may include process steps to wholly or partially define the claimed product as a product of the recited process steps. See *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688

Docket No. F-8223

Ser. No. 10/823,863

(CCPA1972). Each of the independent claims , claims 1 and 2, recite the process steps of the method claims of the parent application which have now issued in U.S. Patent number 6,878,173. To the extent these process limitations produce structure distinctions in the *product* over the prior art, the distinctions must be given as much consideration as traditional product characteristics. Furthermore, "anticipation of invention set forth in product claims cannot be predicated on mere conjecture respecting the characteristics of products that might result from practice of processes disclosed in the references." *W.L. Gore Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, 314 (Fed. Cir. 1983). And finally, in order to anticipate, the prior art reference must be enabling, i.e., it must contain within its four corners a sufficient description to enable one to practice the invention of the rejected claim without undue experimentation or inventive skills. *Akzo N.V. v. U.S. Intern. Trade Com'n*, 1 USPQ2d 1241, 1245 (Fed. Cir 1986). It is respectfully submitted that the process steps set forth in the pending claims produce a product which is structurally different from the prior art products and that the prior art does not enable the production of such a product.

Claim 1 recites the former subject matter of claim 3, that the electrode plate of the battery is produced to have between the core substrate exposed section and the pressed portions, as related in the claims, "substantially true straight boundaries" and that these boundaries "exhibit a deviation from straight of no more than 0.2 mm." This feature is also recited in claim 19. The Examiner's contention is that it would

Docket No. F-8223

Ser. No. 10/823,863

be obvious for a one of ordinary skill in the art to provide a boundary with the claimed straightness "in order to apply a straight lead onto the exposed section of the substrate, as taught in both references, without overlapping active material" because "[i]f the active material boundary is not straight, the lead will overlap the active material and not be securely bonded to the substrate plate." With regard to the Examiner's reasoning, it is not evident where in the prior the Examiner finds a basis for the suggestion.

The claimed boundary is between the core substrate exposed sections and the pressed portions which contain the active material and function as electrodes undergoing electrolytic reactions to produce current. The exposed sections function as conductors to collect current. The *edges* of the exposed sections are connected to flat "straight" collector leads 6 as shown in Fig. 4 of Mikiaki reference. The boundary between the active material impregnated portions, i.e., the pressed portions, and the exposed sections is at the remote side of the exposed section from the *edges* which are connected to the collector lead plate 6.

The Mikiaki reference is concerned with curvature of the *edges* interfering with the connection to the edge. Thus, it is not at all clear why the issue of boundary straightness is highlighted by the references since neither indicate a problem described by the Examiner exists. Indeed, even if the boundary wavers, the lead will still be bound to the edge of the exposed portion which by definition is exposed to allow bonding. Hence it is submitted that, contrary to the conjecture of the Office

Docket No. F-8223

Ser. No. 10/823,863

Action, the reference does not appear to provide suggestion to arrive at the substantially straight boundary edge as claimed.

Still further, it is submitted that it is irrelevant whether the Hideo or Mikiaki references suggest such a boundary straightness, because they do not enable the claimed boundary straightness. It is the process of the present invention which produces the claimed boundary straightness. This process has been found to be novel and nonobvious as demonstrated by the issuance of the method claims in the parent application. Even if one desired to produce a straight boundary as claimed, it is settled case law that mere desirability of a characteristic of a product cannot render a product obvious when the prior art does not teach nor render obvious a process to enable production of a product with the characteristic. *In re Irani*, 166 USPQ2d, 27 (CCPA 1970). The processes disclosed by the Hideo and Mikiaki reference are taught as producing the claimed boundary straightness. Hence, the reference cannot render claim 1 unpatentable.

Claim 12 recites that the core substrate exposed section is processed to have 4% or less residual active material. The Examiner contends that the Hideo reference teaches that no active material is left. Applicant submit that the statement in Hideo is not a statement that one skilled in the art would take in its literal sense. As discussed in the last response, the Hideo reference teaches that the active material is removed by brushing. On page 3, line 19 to page 4, line 1 of the present specification, the method of removal of the active material using a brush and air blower is

Docket No. F-8223

Ser. No. 10/823,863

described as imperfect, resulting in an increased likelihood of unsatisfactory welding occurring during attachment of the current collector formed from the projected part 4, due to residue of the active material left in the projected part by the brush operation. This discussion in the specification is based upon experience using the brushing method and reflects the insight of those skilled in the art who have worked with the brushing technique referenced in the Hideo references. Thus, it is respectfully submitted that the references of the prior art do make obvious a method enabling production of the claimed product characteristic.

Thus, it is respectfully submitted that the rejected claims are not anticipated nor rendered obvious in view of the cited references for the reasons stated above. Reconsideration of the rejections of the claims and their allowance are respectfully requested.

REQUEST FOR EXTENSION OF TIME

Applicant respectfully requests a three month extension of time for responding to the Office Action. **The fee of \$1020.00 for the extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.**

If there is any discrepancy between the fee(s) due and the fee payment authorized in the Credit Card Payment Form PTO-2038 or the Form PTO-2038 is

Docket No. F-8223

Ser. No. 10/823,863

missing or fee payment via the Form PTO-2038 cannot be processed, the USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,
JORDAN AND HAMBURG LLP

By C. Bruce Hamburg

C. Bruce Hamburg
Reg. No. 22,389
Attorney for Applicants

By
and,

By Herbert F. Ruschmann

Herbert F. Ruschmann
Reg. No. 35,341
Attorney for Applicants

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340

enc: Form PTO-2038; and Request for Continued Examination .